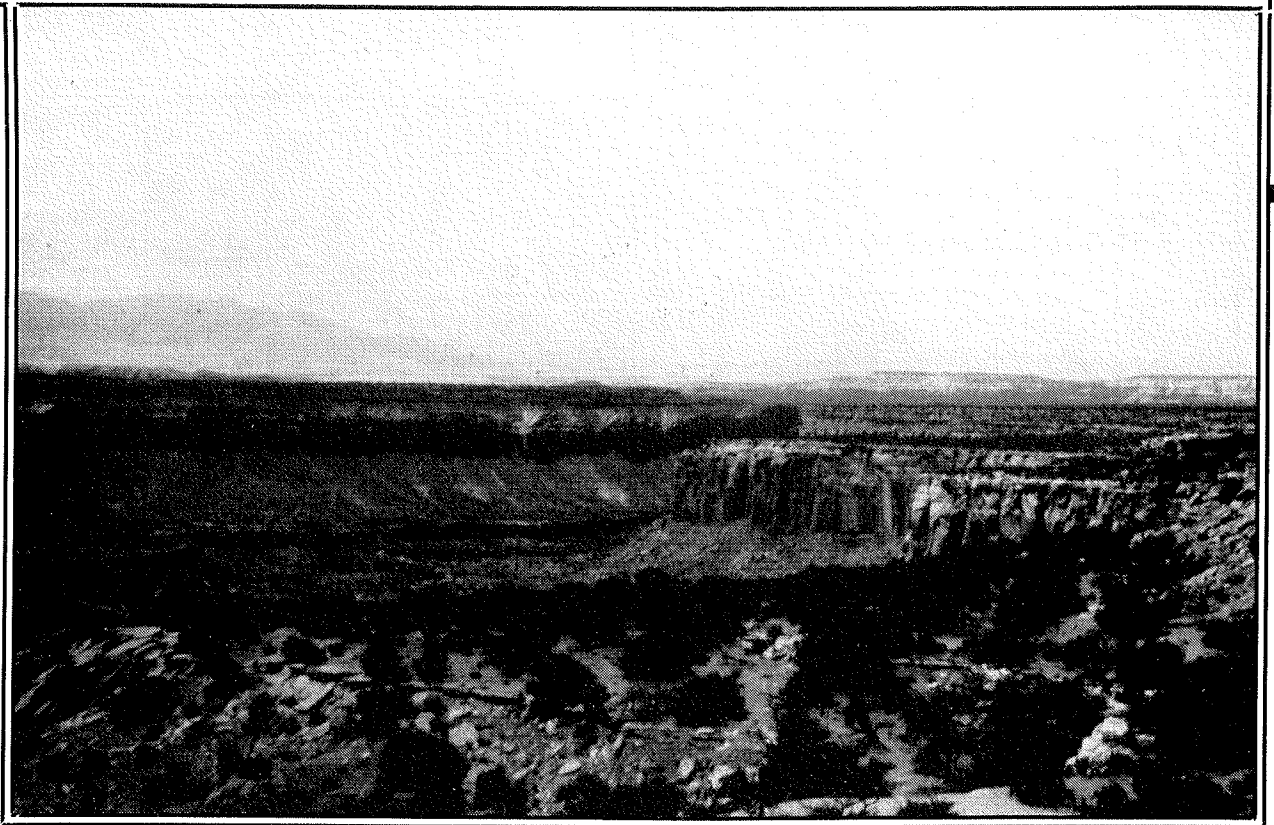


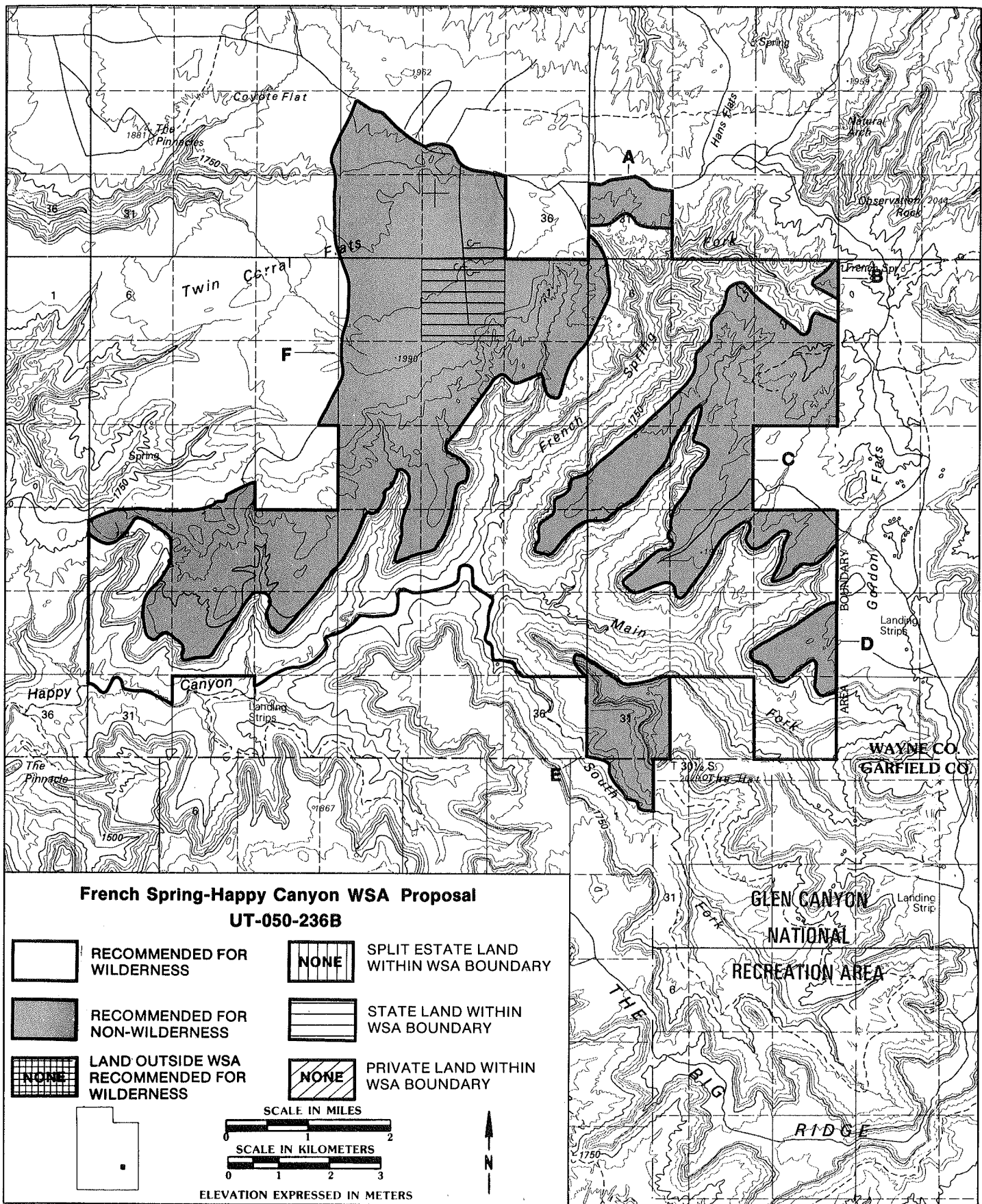
French Spring- Happy Canyon WSA



FRENCH SPRING-HAPPY CANYON WSA

R. 15 E.

R. 16 E.



T. 30 S.

T. 31 S.

FRENCH SPRING-HAPPY CANYON WILDERNESS STUDY AREA

1. THE STUDY AREA: 25,000 acres

The French Spring-Happy Canyon Wilderness Study Area (WSA) (UT-050-236B) is in eastern Wayne and Garfield Counties, about 25 miles southeast of Hanksville, Utah. The WSA is an irregularly shaped unit, about 6 miles wide from north to south and 7 miles long from east to west. About 24,840 acres of the WSA are in Wayne County and the remaining 160 acres are in Garfield County. All of the portion recommended for wilderness designation is in Wayne County. The WSA is contiguous with Glen Canyon National Recreation Area (GCNRA) on the east and abuts the Dirty Devil WSA (UT-050-236A) at one point on the southwest and the Horseshoe Canyon (South) WSA (UT-050-237) for two miles on the north. The rest of the WSA is bounded by section lines, roads, and natural features (see Map).

The WSA contains 25,000 acres of public land administered by the Bureau of Land Management (BLM). One State section (640 acres) is inheld within the WSA, but this section is outside the recommended area (see Table 1).

The drainage in the WSA flows to the Dirty Devil River, southwest of the WSA. The study area consists of high, narrow ridges and a mesa cut by narrow, sheer-walled, meandering canyons 600 to 1,000 feet deep. Elevations in the WSA range from less than 4,750 feet on the canyon floor at the east end of the WSA to more than 6,750 feet in the northeastern portion of the study area. More than half of the surface of the WSA is bare rock and sand; pinyon-juniper, grasses, and blackbrush are the characteristic vegetative types in the portion of the WSA with plant cover.

TABLE 1
LAND STATUS AND ACREAGE SUMMARY IN THE STUDY AREA

WITHIN WILDERNESS STUDY AREA	ACRES
BLM (surface and subsurface)	25,000
Split-Estate (BLM surface only)	0
In-holdings (State, Private)	640
Total	25,640
WITHIN THE RECOMMENDED WILDERNESS BOUNDARY	
BLM (within WSA)	11,110
BLM (outside WSA)	0
Split-Estate (within WSA)	0
Split-Estate (outside WSA)	0
Total BLM land recommended for wilderness	11,110
In-holdings (State, private)	0
WITHIN THE AREA NOT RECOMMENDED FOR WILDERNESS	
BLM	13,890
Split-Estate	0
Total BLM land not recommended for wilderness	13,890
In-holdings (State, Private)	640

Source: BLM File Data

FRENCH SPRING-HAPPY CANYON WILDERNESS STUDY AREA

The WSA was studied under Section 603 of the Federal Land Policy and Management Act (FLPMA) and was included in the Utah BLM Statewide Wilderness Environmental Impact Study (EIS) finalized in November 1990. Three alternatives were analyzed in the EIS: a partial wilderness alternative where 11,110 acres would be designated as wilderness and the remaining 13,890 acres would be released for uses other than wilderness, which is the recommendation in this report; a no action (no wilderness) alternative; and an all wilderness alternative.

2. RECOMMENDATION AND RATIONALE:

- 11,110 acres
(recommended for wilderness)
- 13,890 acres
(not recommended for wilderness)

The recommendation for this WSA is to designate 11,110 acres as wilderness and to release the remaining 13,890 acres for uses other than wilderness (see Map). Designation of the entire area as wilderness is considered to be the environmentally preferable alternative as it would result in the least change from the natural environment over the long term. The alternative selected, however, would be implemented in a manner which would utilize all practical means to avoid or minimize adverse environmental impacts.

The recommended portion of the WSA is confined to the canyons. All of the area is natural and almost all of it has outstanding opportunities for solitude and primitive recreation. The recommended area is within the Tar Sand Triangle Special Tar Sand Area, but conflict with tar sand recovery is not expected because tar sand is not present in the canyons, and the 5,530 acres of tar sand in the designated area would remain as a buffer along the cliff edges even if the area were open to development. No conflicts exist with other land uses.

In the area not recommended for wilderness designation, which consists of the benchlands above the canyon rims in parcels A through F, the opportunities for recreation and primitive recreation are not outstanding. This portion of the WSA has potential for tar sand extraction by in-situ methods in association with future development of the Tar Sand

Triangle Special Tar Sand Area. Although development is not certain, potential for recovery of bitumen from tar sand is given precedence over known wilderness values.

3. CRITERIA CONSIDERED IN DEVELOPING THE PARTIAL WILDERNESS RECOMMENDATION

Wilderness Characteristics

A. Naturalness

Naturalness is defined as an attribute in which the evidence of man is substantially unnoticeable to the average visitor and where minor imprints of man exhibit no cumulative impact that is substantially noticeable. Most of the WSA is in a natural condition. The Twin Corral Flats portion of the WSA consists of a broad, gently rolling benchland mesa covered with grass and scattered pinyon-juniper trees. The Happy and French Spring canyons deeply and abruptly cut the mesa with sheer-walled, meandering canyons. These are characterized by colorful rock formations and sheer cliffs to the canyon bottoms and rounded slickrock domes. Other landforms include buttes, spires, arroyos, rockfalls, alluvial fans, terraces, and sand dunes. All of these features combine to heighten the quality of naturalness in the WSA. The WSA has no significantly noticeable human intrusions. Approximately 8 miles of ways on Twin Corral and Gordon Flats are substantially unnoticeable and are rehabilitating by natural means. The only other intrusions are one corral and two unimproved wells in French Spring and Happy Canyon. Naturalness has not been altered since the BLM Intensive Wilderness Inventory in 1980.

B. Solitude

Opportunities for solitude are outstanding in French Spring and Happy Canyon (approximately 11,000 acres) but less than outstanding on the remaining 14,000 acres.

The meandering canyons, 600 to 1,000 feet deep, provide outstanding opportunities for solitude. Vegetative screening is very sparse in the canyon bottoms, however. Opportunities for solitude are less than outstanding above the

FRENCH SPRING-HAPPY CANYON WILDERNESS STUDY AREA

canyon rim, on rolling mesas vegetated with grasses and scattered pinyon.

No sights and sounds from outside the WSA adversely affect opportunities for solitude. The current low recreational use contributes to the opportunities for solitude.

C. Primitive and Unconfined Recreation

In the canyons, opportunities for primitive and unconfined recreation are outstanding on about 11,000 acres, the same areas that provide outstanding solitude. Opportunities for primitive recreation are less than outstanding on the mesas, which are the remaining 14,000 acres of the WSA.

The WSA has outstanding opportunities only for geological sightseeing in the canyons. Photography, dayhiking, and scenic sightseeing are average in terms of recreational experience.

The longest hiking route is 11 miles from Gordon Flats to Happy Canyon via French Spring Canyon. Recreational opportunities are somewhat restricted by terrain: mesas are the most limiting terrain in the WSA.

D. Special Features

The WSA's exceptional scenic values on 13,480 acres (54 percent of the WSA) were identified as a special feature during the wilderness inventory and was rated as outstanding for scenic quality.

At least one known archaeological site in the WSA is eligible for nomination to the National Register of Historic Places.

Desert bighorn sheep, which is a wilderness associated species, may inhabit the WSA. The endangered peregrine falcon and black-footed ferret may inhabit or visit the WSA. Nine other U.S. Fish and Wildlife Service (FWS) Candidate threatened or endangered animal species that are considered sensitive, i.e., may become candidates for listing as threatened or endangered, may inhabit or visit the WSA. Refer to Appendix 4 and the Affected Environment, Wildlife Including Special Status Species section of the Utah

BLM Statewide Wilderness Final EIS for additional information.

Diversity in the National Wilderness Preservation System (NWPS)

A. Expanding the Diversity of Natural Systems and Features as represented by Ecosystems

Wilderness designation of this WSA would add a potential natural vegetation (PNV) ecosystem not presently represented in the NWPS.

PNV is the vegetative type that would eventually become climax vegetation if not altered by human interference, and is not necessarily the vegetation that is currently present in an area.

The WSA is in the Colorado Plateau Province/Ecoregion. The PNV in the WSA is galleta-threeawn shrubsteppe (14,000 acres) and juniper-pinyon woodland (11,000 acres). Juniper-pinyon woodland PNV is well represented in the NWPS and other BLM wilderness study areas, but galleta-threeawn shrubsteppe PNV is not presently represented in the NWPS.

This information is summarized in Table 2, from data compiled in December 1989.

B. Assessing the Opportunities for Solitude or Primitive Recreation within a Days Driving Time (5 Hours) of Major Population Centers

The WSA is within a 5-hour drive of the Provo-Orem, Utah, standard metropolitan statistical area. Table 3 summarizes the number and acreage of designated wilderness and other BLM study areas within a 5-hour drive of the Provo-Orem population center.

C. Balancing the Geographic Distribution of Wilderness Areas

The French Spring-Happy Canyon WSA would not contribute significantly to balancing the geographic distribution of wilderness areas within the NWPS. As of January 1987, the NWPS included 93 areas comprising 5,475,207 acres in Utah and Arizona and Colorado, the adjacent states nearest the WSA.

FRENCH SPRING-HAPPY CANYON WILDERNESS STUDY AREA

TABLE 2
ECOSYSTEM REPRESENTATION

BAILEY-KUCHLER CLASSIFICATION (PNV)	NWPS AREAS		OTHER BLM STUDIES	
	AREAS	ACRES	AREAS	ACRES
NATIONWIDE (COLORADO PLATEAU PROVINCE)				
Juniper-Pinyon Woodland	11	1,401,745	84	2,133,005
Galleta-Threeawn Shrubsteppe	0	0	10	176,726
UTAH (COLORADO PLATEAU PROVINCE)				
Juniper-Pinyon Woodland	1	26,000	53	1,695,198
Galleta-Threeawn Shrubsteppe	0	0	10	176,726

Source: BLM File Data.

TABLE 3
WILDERNESS OPPORTUNITIES FOR RESIDENTS OF MAJOR POPULATION CENTERS

POPULATION CENTERS	NWPS AREAS		OTHER BLM STUDIES	
	AREAS	ACRES	AREA	ACRES
Provo-Orem	11	721,793	90	2,761,868

Source: BLM File Data.

A French Spring-Happy Canyon Wilderness would supplement the NWPS in the Canyon Lands Section of the Colorado Plateau, however, where there are just two established wildernesses, totalling 70,751 acres.

There are two designated wilderness areas within 100 miles of the WSA. To the southeast is the 45,000-acre Dark Canyon Wilderness, and to the west-southwest is the 25,751-acre Box-Death Hollow Wilderness. Both are administered by the National Forest Service (FS).

Manageability (The area must be capable of being effectively managed to preserve its wilderness character.)

The entire WSA, including the portion recommended for wilderness designation can be managed to preserve wilderness values now in the area. Current uses such as livestock grazing and maintenance of two wells in the recommended area and one corral in the area not recommended would continue with little or no effect on wilderness values.

There are 2,100 acres of pre-FLPMA oil and gas leases and 1,520 acres of post-FLPMA leases in the area recommended as wilderness. There are 4,260 acres of pre-FLPMA lease and 500 acres of post-FLPMA lease in the area not recommended for wilderness. The post-FLPMA leases are subject to nonimpairment of wilderness values and it is expected that they will expire and not be renewed. The pre-FLPMA leases likely will not be developed for oil and gas but are under application for conversion to combined hydrocarbon leases. Oil and gas leases converted to combined hydrocarbon leases would contain nonimpairment stipulations and it is projected that development of tar sand would not take place if the WSA is designated wilderness. There are presently 480 acres of mining claims in the WSA. All are in the area not recommended as wilderness. Development of these claims is not expected in the foreseeable future due to the low probability of occurrence of locatable minerals.

FRENCH SPRING-HAPPY CANYON WILDERNESS STUDY AREA

There are no private in-holdings, rights-of-way, or subsurface rights within the WSA. There is only one State section (640 acres) in the WSA, all in the area not recommended as wilderness. The presence of this section of land would not create manageability problems.

Energy and Mineral Resource Values

The U.S. Geological System (USGS), and U.S. Bureau of Mines (USBM), examined the WSA for mineral and energy resource potential and prepared a report and map (USGS Miscellaneous Field Studies Map MF 1754-A, R. F. Dubiel, et al., 1985). The report indicates that the WSA has a moderate potential for oil and gas. The potential for tar sand resources is high. It is estimated that up to 1.6 billion barrels of oil may be contained in the tar sands which underlie about 25 percent of the WSA. The study area appears to have moderate potential for undiscovered uranium resources. The potential is low for metals other than uranium, however.

The extreme southwestern part of the study area has a moderate potential for uranium, as uranium-bearing strata and favorable geologic conditions are known just outside the WSA and may exist within that portion of the study area.

The WSA has some potential for materials that could be used for construction purposes. Sand and gravel are present in terrace deposits and could be sources of building stone. Larger and more accessible deposits of the same kind of materials are available outside the WSA.

Impacts on Resources

The comparative impact table (Table 4) summarizes the effects on pertinent resources for alternatives considered including designation or nondesignation of the area as wilderness.

Local Social and Economic Considerations

With BLM's recommended partial wilderness alternative, economic conditions would not be affected. In the long term, there would be major beneficial and adverse effects on all economic sectors and infrastructures of Wayne, Garfield, and possibly Emery counties from tar

sand development because most of the tar sand deposits in the WSA would be in the area not recommended for wilderness designation where they could be accessed and developed.

Summary of WSA-Specific Comments

Public involvement has occurred throughout the wilderness review process. Comments received during the early stages of the EIS preparation were used to develop significant study issues and alternatives for the ultimate management of the WSA.

During formal public review of the Draft EIS, a total of 82 inputs specifically addressing this WSA were received from 328 commenters, including oral statements received at 17 public hearings on the EIS. Each letter or oral testimony was considered to be one input. Duplicate letters or oral statements by the same commenter were not counted as an additional input or signature. Each individual was credited with one signature or testimony regardless of the number of inputs.

In general, 308 commenters supported wilderness designation for part or all of the WSA, while 13 commenters were opposed. Seven commenters addressed the relative merits of the EIS but took no formal position on wilderness designation.

Those favoring wilderness commented that wilderness designation would protect the wilderness values in the WSA from development, preserve the area for future generations, and add ecosystem diversity to the NWPS. The majority of those commenting in favor of wilderness were from other states.

Those opposing wilderness were concerned that many similar areas are already under consideration for possible designation, that there is no need for more wilderness, and that wilderness designation of the area would harm state and local economy. Those opposing wilderness designation were about equally from rural Utah and from outside the state.

Three Federal agencies, the National Park Service (NPS), the Environmental Protection Agency (EPA) and the USBM

FRENCH SPRING-HAPPY CANYON WILDERNESS STUDY AREA

commented on the Draft EIS. Both the NPS and EPA commented that the analysis of impacts associated with tar sand development should be expanded.

The USBM did not take a position on wilderness designation for the WSA, but stated that the BLM had underestimated the petroleum potential of the WSA.

No comment letters were received on the Final EIS.

There is one State section (640 acres) in the WSA. In commenting on the Draft EIS, the State pointed out errors in mapping, mineral favorability and certainty ratings and BLM's estimates of the size of the tar sand deposit in the WSA. The State expressed concern about conflicts which may impact potential tar sand development and the need to protect special features in the WSA. According to the State, the French Spring-Happy Canyon WSA has low wilderness quality and high conflicts relative to other WSAs in the region. The major conflict would be with tar sand development.

About 24,840 acres of the WSA are in Wayne County. The Wayne County Master Planning Project Final Report does not address this area specifically, but recommends that "... open spaces be used for many purposes rather than strictly as wilderness areas." It also states that "... outstanding natural landmarks should be preserved as much as possible."

About 160 acres of the WSA are in Garfield County. The Garfield County Master Plan covers portions of the WSA. Garfield County has previously proposed to the Utah Congressional Delegation that 142,653 acres in three BLM and one FS area be designated as wilderness. The county plan recommends that the remaining lands within the county, including the French Spring-Happy Canyon WSA, be retained for multiple uses.

Both the Wayne and Garfield County Commissions are opposed to wilderness designation for this WSA and have endorsed the Consolidated Local Government Response to Wilderness that opposes wilderness designation of BLM land in Utah.

FRENCH SPRING-HAPPY CANYON WSA

Table 4
Comparative Summary of Impacts by Alternative

Alternatives		All Wilderness (25,000 Acres)	
Issue Topic	Recommendation Partial Wilderness (11,110 Acres)	No Action/No Wilderness	Wilderness designation would preserve wilderness values overall throughout the WSA. In the short term, naturalness and opportunities for solitude and primitive recreation would be directly lost on 5 acres and would be indirectly reduced in quality on up to 1,000 acres. Special features would be preserved.
	Impacts on Wilderness Values	Wilderness values would not be protected by wilderness designation and loss would occur as intrusions increase. Naturalness and opportunities for solitude and primitive recreation would be directly lost on 9 acres because of uranium exploration and development and construction of access to State in-held lands, and indirectly reduced in quality on up to 1,500 acres more in the short term. In the long term, naturalness and opportunities for solitude and primitive recreation would be directly lost on up to 5,550 acres because of tar sand development and indirectly reduced in quality throughout the WSA. Special features would be disturbed. Vehicular use of ways and mining roads would be an annoyance to those seeking solitude and primitive recreational activities.	
Impacts on Air Quality	Without new technology for extraction of oil from tar sand, long-term development would reduce air quality and with variances could exceed PSD Class I limitations in the Canyonland National Park for 45 to 270 years.	Over the short term, air quality would not be reduced by activities in the WSA. Without new technology for extraction of oil from tar sand, long-term development would reduce air quality and with variances could exceed PSD Class I limitations in the Canyonlands National Park for 45 to 270 years.	Air quality would not be affected by activities inside the WSA.

FRENCH SPRING-HAPPY CANYON WSA

Table 4 (Continued)
Comparative Summary of Impacts by Alternative

Issue Topic	Alternatives		
	Recommendation Partial Wilderness (11,110 Acres)	No Action/No Wilderness	All Wilderness (25,000 Acres)
Impacts on Geology and Topography	Impacts on geologic and topographic features would be as described for the No Action/No Wilderness Alternative because the same activities would occur with both alternatives.	In the long term, geologic and topographic features would be altered by tar sand development on 22 percent (5,550 acres) of the WSA.	Geologic and topographic features would not be significantly affected.
Impacts on Soils	Impacts would be essentially the same as with the No Action/No Wilderness Alternative. Increases in the soil erosion would be significant on a localized basis. Discharges into the Dirty Devil River would not be significant.	Increases in soil erosion would be significant (0.28 percent increase in the WSA) on a localized basis. Because of required reclamation and mitigation and because of low precipitation and flow in the drainage, increases in sediment discharges to the Dirty Devil River would be small.	A projected 0.03-percent increase in soil erosion would not be significant.
Impacts on Vegetation	Impacts would be the same as with the No Action/No Wilderness Alternative. Over the long term, composition of vegetation types would be altered or destroyed on 22 percent (5,550 acres) of the WSA (50 percent of the vegetated area).	Over the long term, composition of vegetation types would be altered or destroyed on 22 percent (5,550 acres) of the WSA (50 percent of the vegetated area). Special status plant species are not known to occur in the WSA and would not be affected.	Composition of existing vegetation types would be preserved.
Impacts on Water Resources	Over the long term, tar sand development would reduce the quality of groundwater, reduce salinity in the Colorado River, and compete with other potential water uses in the Dirty Devil River system.	Water quality, quantity, and uses would not be affected in the short term. Over the long term, tar sand development would reduce the quality of groundwater, reduce salinity in the Colorado River, reduce the flow of the Dirty Devil River, and compete with other potential consumptive water uses in the Dirty Devil River system.	In the short term, ground and surface water quality and quantity would not be affected. In the long term, groundwater quality could be reduced by tar sand development outside the WSA.

FRENCH SPRING-HAPPY CANYON WSA

Table 4 (Continued)
Comparative Summary of Impacts by Alternative

Issue Topic	Alternatives		
	Recommendation Partial Wilderness (11,110 Acres)	No Action/No Wilderness	All Wilderness (25,000 Acres)
Impacts on Mineral and Energy Exploration and Production	This alternative would not significantly affect mineral production or exploration because the uranium and known tar sand areas would be in the nondesignated area and could be explored and developed without wilderness management restrictions.	This alternative would not adversely affect mineral exploration or production because mineral leasing, location of mining claims, and development of minerals would continue without restrictions for protection of wilderness values.	The long-term potential for production of 503 million barrels of recoverable oil from tar sand and an unknown amount of uranium oxide would be foregone.
Impacts on Wildlife Habitat and Populations	Impacts would be essentially the same as with the No Action/No Wilderness Alternative. However, wildlife would benefit from provision of solitude on 44 percent (11,110 acres) of the WSA.	Over the long term, tar sand development would reduce available habitat for special status and most other species. Populations of some species would be reduced. Reclamation efforts would improve habitat for some species. Substantial value yearlong desert bighorn sheep habitat would not be disturbed.	Wildlife habitat and populations would be protected and would benefit from solitude.
Impacts on Livestock Management	In the long term, available livestock forage in one allotment would be reduced by 4 percent for the duration of tar sand activities. Access to the 8 miles of ways would not be restricted and livestock management would not be affected.	In the long term, available livestock forage in one allotment would be reduced by 4 percent for the duration of tar sand activities.	Restrictions on access would result in inconvenience and slight increases in management costs for one live-stock permittee.
Impacts on Visual Resources	Impacts on visual resources would be the same as with the No Action/No Wilderness Alternative. Visual resources would be degraded throughout the WSA and VRM objectives would not be met on directly disturbed areas (5,550 acres).	Visual resources would be degraded throughout the WSA and VRM objectives would not be met on directly disturbed areas (5,550 acres).	Visual resources would be preserved because the potential for disturbance would be reduced to about 5 acres.

FRENCH SPRING-HAPPY CANYON WSA

Table 4 (Continued)
Comparative Summary of Impacts by Alternative

Alternatives			
Issue Topic	Recommendation	No Action/No Wilderness	All Wilderness
	Partial Wilderness (11,110 Acres)		(25,000 Acres)
Impacts on Cultural Resources	Impacts would be approximately the same as with the No Action/No Wilderness Alternative because the same disturbance would occur. Only two recorded sites would receive protection as a result of wilderness designation under this alternative. The remaining 28 sites would be in the nondesignated area and would be protected by existing law.	Inadvertent loss or damage of archaeological sites may occur due to surface development and/or continued ORV use. Intentional vandalism and artifact collection may increase due to increased activity and accessibility. Cultural resource management would continue without wilderness management constraints.	All cultural resource management procedures would be subject to restrictions. The benefits of protection from most surface disturbance would outweigh potential damage from increased vandalism due to wilderness designation. Closure to all vehicular access would protect sites from damage and decrease accessibility in the unit.
Impacts on Recreation	Primitive recreation opportunities would be protected on 44 percent (11,110 acres) of the WSA below the canyon rims. Approximately 8 miles of vehicular ways would remain open for vehicular use. Long-term impacts of tar sand development would be as analyzed for the No Action/No Wilderness Alternative.	Opportunities for vehicular-based recreation would be maintained. Over the long term, opportunities for primitive recreation would be eliminated from the portion of the WSA above the canyon rims and reduced in quality in adjacent WSAs and proposed wilderness in the Glen Canyon NRA. Approximately 8 miles of vehicular ways would remain open for vehicular use.	This alternative would benefit primitive recreation by reducing surface-disturbing activities and increasing management attention and recognition of wilderness values. Although eliminated from the WSA, vehicle-based recreation would not decline on a regional basis because there are other more suitable ORV use areas in the vicinity of the WSA.
Impacts on Economic Conditions	Economic conditions would not be affected in the short term. In the long term, there would be major beneficial and adverse effects on all economic sectors and infrastructures of Wayne, Garfield, and possibly Emery Counties from tar sand development.	Economic conditions would not be affected in the short term. In the long term, there would be major beneficial and adverse effects on all economic sectors and infrastructures in Wayne, Garfield, and possibly Emery Counties from tar sand development.	Economic conditions would not be significantly changed in the short term. In the long term, major beneficial or adverse impacts of tar sand development on economic sectors and infrastructures of Wayne, Garfield, and possibly Emery Counties would not occur.